



# ABCCORK PRESENTS

## Testing the Wine: The Importance of the Hydrometer

The hydrometer is a necessary piece of test equipment essential to the wine making process. Why is it so important? This article will outline the importance of a hydrometer, proper functioning and how to use one.

Vintners know that the amount of sugar in the wine base affects the production of the finished product. Knowing this, it is important to be able to measure the amount of sugar in your wine: a hydrometer does just that. This instrument is generally made of blown glass, with a weighted bottom and a long narrow stem. A scale is etched on the stem to allow a reading of the specific gravity. Thus, the hydrometer allows the vintner to measure the relative weight of liquid (wine) compared to plain water: specifically, it allows a vintner to measure the specific gravity or sugar present in their wine.

The hydrometer is a necessary tool in monitoring the fermentation process; how it is progressing and when it is finished. It can also be used to estimate the potential alcohol percentage, and can even be used to calculate the percent of alcohol in the finished wine.

Here's a bit about how it works. After you have filled a sanitized test jar with wine (taken from the wine with a wine thief), you gently lower the sanitized hydrometer into the test jar (gently spin the hydrometer as you release it). Making sure that the hydrometer is not touching the sides of the jar but is floating free, you can take a reading of the lowest line of the liquid at the surface, where the hydrometer is sitting above the water line. If the hydrometer is floating rather high it means that the liquid is heavy, this is usually the case before fermentation when the wine is full of sugar. Alcohol is lighter than sugar, and as the yeast turns the sugar into alcohol and CO<sub>2</sub> during fermentation, the wine becomes lighter and the hydrometer does not float as high.

Before purchasing a hydrometer there are a few things you will need to know. The range of readings, the highest and lowest, on the hydrometer are important. Make sure the product suits your purpose. A standard range for home vintners is 0.990 – 1.120. Many hydrometers exist on the market so be sure to know what a specific one measures; specific gravity, potential alcohol, and sugar content. It is great if you can get a hydrometer that measures all three. Also important to know is the calibration temperature of the hydrometer, and how to convert your specific gravity reading based on the temperature of your sample.

Quality hydrometers will come with instructions and a user's guide. Look for one that fits your test jar!



**ABCCORK**  
YOUR ONE STOP SHOPPING SOURCE SINCE 1972

[www.abccork.com](http://www.abccork.com)  
London, Ontario N6N 1N7